

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023910**Date Inspected:** 21-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Tony Sherwood**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

This QA Inspector observed the work in progress on the upper and lower Interior Corner Closure Splice Plates located at the B- C and C-D corners in the Tower sections and elevations noted below.

North Tower, elevation 51 meters: This QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) performing production welding using the Flux Cored Arc Welding (FCAW) process on the lower half of the upper splice plate located at the C-D corner of the tower. This QA Inspector observed QC Inspector Tony Sherwood verify the following FCAW parameters; 255 amperes and 21.9 volts at a travel speed of 85 mm per minute to produce a heat input of 3.94 Kj per mm. The welding observed appeared to comply with ABF-WPS-D15-F2200-3. This QA Inspector observed QC Inspector Tony Sherwood periodically verify the preheat temperature of 325°F. This QA Inspector randomly verified the preheat temperature was within range of the WPS.

East Tower, elevation 51 meters: This QA observed ABF welding personnel Morgan Winters (#3305) performing production welding using the FACW process on the lower splice plate, top fillet weld in the horizontal (2F) position on the splice plate located at the C-D corner of the tower. This QA Inspector observed QC Inspector Tony Sherwood verify the following FCAW parameters; 340 amperes and 22 volts at a travel speed of 175 mm per

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minute to produce a heat input of 2.56 Kj per mm. The welding observed appeared to comply with ABF-WPS-D15-F2200-2. This QA Inspector observed QC Inspector Tony Sherwood periodically verify the preheat temperature of 325°F. This QA Inspector randomly verified the preheat temperature was within range of the WPS.

Later in the shift this QA Inspector observed ABF welding personnel stopped production welding at approximately 1400 hours and place the induction heat blankets over the welding to start the post weld heating.

This QA Inspector observed ABF welding personnel Mike Jiminez (#46710) performing Shielded Metal Arc Welding (SMAW) in the flat position on lifting lug holes #1 and #4 located at 8W-PP68-W5. This QA Inspector verified the following welding parameters; 140 amperes using a 3.2 mm diameter E7018H4R electrode. This QA Inspector randomly observed QC Inspector John Pagliero periodically monitoring the work being performed, which included monitoring the preheat/interpass temperatures and welding parameters. The welding observed appeared to comply with ABF-WPS-D15-1050A-CU. The work observed appeared to comply with the contract requirements.

### Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted below there were no notable conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hager,Craig	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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